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| 10/531,569 | 04/18/2005 | Tao Zhang | 46843-216978 RK | 1394 |

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| EXAMINER |
|---|
| SHIFERAW, ELENI A |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2436 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) |
|---|---|---|
| | 10/531,569 | ZHANG ET AL. |
| **Office Action Summary** | Examiner | Art Unit | |
| | ELENI A. SHIFERAW | 2436 | |

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **3** MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on _15 December 2008_.

2a) ☐ This action is **FINAL.**    2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) _1-5 and 7-10_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-5 and 7-10_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## *DETAILED ACTION*

1.    A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 12/15/2008 has been entered.

### *Information Disclosure Statement*

2.    The objection to the IDS's submitted on 04/18/2005 and 08/10/2006 is withdrawn

because they meet the minimum requirements of the MPEP.

### *Specification*

3.    The objection to the abstract is withdrawn based on the new abstract submitted on

03/11/2008. The objection to the disclosure is withdrawn based on the amendments made to the

disclosure submitted on 03/11/2008.

### *Claim Objections*

3.    The objections to claims 1 and 5 are withdrawn based on the amendments submitted on

03/11/2008.

### *Status of Claims*

4.    **Claims 1-5 10 are pending in this Office Action.**

**Claims 1 and 4-5 are amended claims 7-10 are presently added.**

**Claim 6 is cancelled.**

### *Response to Amendment*

5.      **The 35 U.S.C. 112, second paragraph rejection on claim 1 is withdrawn based on the**

**applicant's amendments submitted on 03/11/2008.**

### *Response to Arguments*

6.      Applicant's arguments filed 12/15/2008 have been fully considered but they are moot in

view of new ground of rejection.

### *Claim Objections*

4.      Claim 4 is objected to: in line 6 where in "by the" should be changed to "by the MG".

### *Claim Rejections - 35 USC § 101*

5.      35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter,
> or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

6.      Claim(s) 1-5 and 7-8 is/are rejected under 35 U.S.C. 101 as not falling within one of the

four statutory categories of invention.  While the claims recite a series of steps or acts to be

performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to particular machine, or

(2) transform underlying subject matter (such as an article or material) to a different state or

thing. See page 10 of In Re Bilski 88 USPQ2d 1385. The instant claims are neither positively

tied to a particular machine that accomplishes the claimed method steps nor transform

underlying subject matter, and therefore do not qualify as a statutory process.   The method

including steps of … is broad enough that the claim could be completely performed mentally,

verbally or without a machine nor is any transformation apparent.


7.      Claims 9-10 are rejected under 101 because it is directed to non-statutory subject matter

as failing to fall within a statutory category and as being directed to software per se (although the

preamble of claim 1 recites "A system" it does not inherently mean that the claim is directed to a

machine). There is not hardware element claimed in the body of the claim. The specification also

describes, the MGC as a protocol. Therefore, claims 9-10 are software per se. and the machine

claim does not recite any hardware element. See MPEP 2106. Appropriate correction is required.


### *Claim Rejections - 35 USC § 103*

8.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

9.      Claims 1, 4, 5 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over

US 6961857 (Floryanzia) in view of Borella et al. 6353891 B1.

     **As to claims 1, 7 and 9,** Floryanzia discloses an authentication method/system for

network security, comprising the following configuring a Media Gateway (MG) with an

authentication key, and setting a security data package on a network protocol, by a Media

Gateway Controller (MGC) **(Floryanzia column 3, lines 54-67; a Gateway sends an Access**

**Token in all Registration Request messages.  The Access Token contains information that**

authenticates the Gateway to the Gatekeeper.  The Gatekeeper formats a message

to an authentication server that will authenticate the information contained in

the token, and the server responds with either an Access-Accept or Access-Reject message

and also see col. 2 lines 49-60; ITU-T Recommendation H.235 of February, 1998 describes

security and encryption for H-series multimedia terminals, including H.323 and other

H.245-based terminals.  Section 10.3.3 of H.235 specifies that data structures

carrying encrypted information, called "cryptoTokens," can be used to allow

endpoints to authenticate themselves to one another....);

during a security authentication, by the MGC, sending security authentication request

containing a security authentication parameter to the MG using the data package **(Floryanzia**

**column 4, lines 23-31; receiving non-encrypted authentication request information**

**comprises the steps of** *receiving an access token comprising a general identifier value, a time*

*stamp value, a challenge value, and a random value.*  **In a related feature, the step of**

**receiving non-encrypted authentication request information comprises the steps of**

**receiving an H.235 ClearToken comprising a general identifier value, a time stamp value,**

**a challenge value, and a random value);**

performing an encryption calculation according to the security parameter and the

authentication key and reporting a calculation result to the MGC, by the MG, (Floryanzia

column10, lines 1-43; **an encryption calculation is performed according to the security**

**parameter and the authentication key and/or generating CHAP protocol response using**

**the alias, password, and the CHAP Challenge values that the authentication server has**

**received from the Gatekeeper in the Access Request packet.  In one specific embodiment,**

the response is computed as: **Response=[CHAP ID+User Password+CHAP**

**Challenge]MD5 Hash …. and the Gatekeeper responds to the Gateway with a Registration**

**Confirm (RCF) message);** and

determining whether the MG is legal by computing the calculation result with a result

calculated by the MGC (Floryanzia column 10, lines 1-43; **it is also determined whether the**

**response it has generated matches attributes of the Access Token. The determination is**

**carried out by determining whether the Response matches a Challenge that is computed**

**from the Access Request message attributes as follows: Challenge=[*Random***

***value+Gateway User Password+Time Stamp value*]MD5 Hash. If the computed Response**

**matches the computed Challenge, based on the values received from the Gatekeeper, then**

**sending an Access Accept packet to the Gatekeeper. If the computed Response does not**

**match the computed Challenge, or the alias of the requesting Gateway is not in a database**

**of the authentication server, sending an Access Reject packet back to the Gatekeeper….**

**and the Gatekeeper responds to the Gateway with a Registration Confirm (RCF)**

**message).**

Floryanzia fails to disclose the determining step <u>by the MGC by computing</u> the

calculation result with the result calculated by the MGC.

However Borella et al. discloses determining by the MGC whether the MG is legal by

computing the calculation result with a result calculated by the MG (**see fig. 3 and 5; wherein**

**only two devices RSIP host and RSIP gateway are both used to calculate a calculated**

**result based on a received parameters and determine legality**).

Therefore it would have been obvious to one having ordinary skill in the art at the time of

the invention was made to modify the teachings of Borella et al. within the system of Floryanzia

because they are analogous in hash authentication and access controlling and determination.

One would have been motivated to incorporate the teachings to generate authentication locally

and enhance security.

**As to claims 4, 8 and 10,** Floryanzia discloses the authentication method/system for

network security, wherein said data package comprises a security authentication request signal

and a security authentication completion event, said security authentication request signal

comprises a security authentication parameter, and said security authentication completion event

comprises a security authentication result parameter (Floryanzia column 8, lines 5-34) and

wherein the step of reporting a calculation result includes reporting by MG the calculation result

to the MGC via a security authentication completion event in a data package (see fig. 3C element

332 and 336 and column 3, lines 54-67).

**As to claim 5,** (Currently Amended) Floryanzia discloses the authentication method for

network security according to claim 4, wherein the security authentication parameter is a random

number (see col. 4 lines 23-31 and col. 10 lines 1-42; random value)

***Claim Rejections - 35 USC § 103***

10.    The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section
> 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the
> subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill
> in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

11.     **Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

**US 6961857 (Floryanzia) and Borella et al. 6353891 B1 and further in view of US**

**20020120760 (Kimchi).**

        **As to claim 2,** (Original) Floryanzia and Borella et al. teach the authentication method

for network security according to claim 1.  Floryanzia and Borella et al. fail to teach wherein said

network protocol is Media Gateway Control Protocol (MGCP).

        However, Kimchi discloses wherein said network protocol is Media Gateway Control

Protocol (MGCP) (Kimchi paragraph 0036, lines 1-17).

        It would be obvious to one of ordinary skill in the art at the time of the applicant's

invention that the MGCP is one of the proposed upgrades for the older H. 323 standard (Kimchi

paragraph 0036, lines 1-17).

        **As to claim 3,** (Original) Floryanzia and Borella et al. teach the authentication method

for network security according to claim 1.  Floryanzia and Borella et al. fail to teach wherein said

network protocol is H248 protocol.

        However, Kimchi discloses wherein said network protocol is H248 protocol (Kimchi

paragraph 0036, lines 1-17).

        It would be obvious to one of ordinary skill in the art at the time of the applicant's

invention that the H248 is another proposed upgrade for the older H. 323 standard (Kimchi

paragraph 0036, lines 1-17).


                                                *Remarks*

7.    Applicant has presented amendments for the 35 U.S.C. 112, second paragraph rejection,
has added 1 new claim, and has made some amendments for clarification.  Applicant has made
arguments for the rest of the response see below.


### *Conclusion*

12.    Any inquiry concerning this communication or earlier communications from the
examiner should be directed to ELENI A. SHIFERAW whose telephone number is (571)272-
3867.  The examiner can normally be reached on Mon-Fri 8:00am-5:00pm.

      If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Nasser R. Moazzami can be reached on (571) 272-4195.  The fax phone number for
the organization where this application or proceeding is assigned is 571-273-8300.

      Information regarding the status of an application may be obtained from the Patent
Application Information Retrieval (PAIR) system.  Status information for published applications
may be obtained from either Private PAIR or Public PAIR.  Status information for unpublished
applications is available through Private PAIR only.  For more information about the PAIR
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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would
like assistance from a USPTO Customer Service Representative or access to the automated
information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


/Eleni A Shiferaw/
Examiner, Art Unit 2436